

Maths

# Use Cubic Graphs to Solve Equations

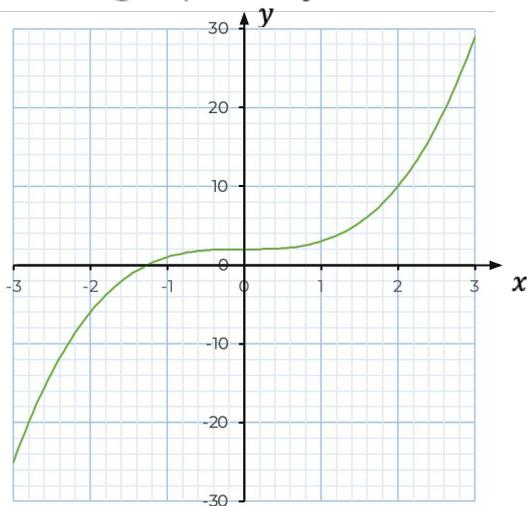
Miss Davies

**Please note some slides do have colour font on them**



# Use cubic graphs to solve equations

1. Here is the graph of  $y = x^3 + 2$

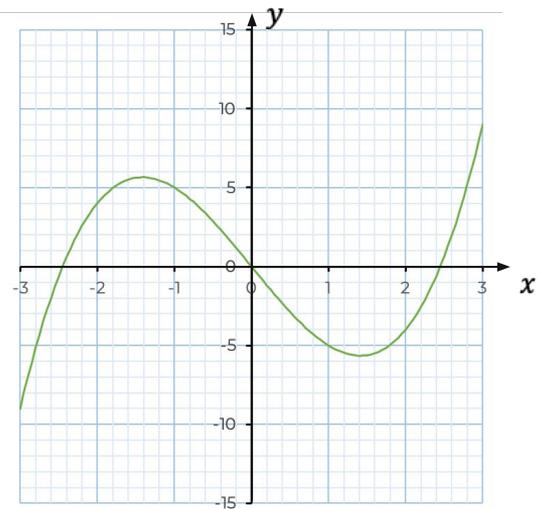


Use the graph to estimate the solutions to each equation.

a)  $x^3 + 2 = 0$

b)  $x^3 + 2 = 8$

2. Here is the graph of  $y = x^3 - 6x$



Use the graph to estimate the solutions.

a)  $x^3 - 6x = 0$

b)  $x^3 - 6x = -4$

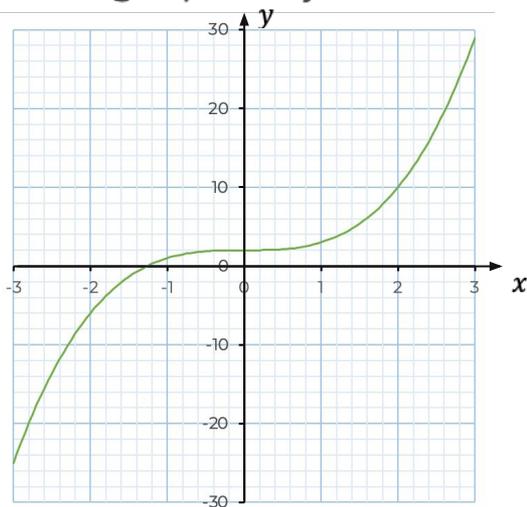


# Answers



# Use cubic graphs to solve equations

1. Here is the graph of  $y = x^3 + 2$

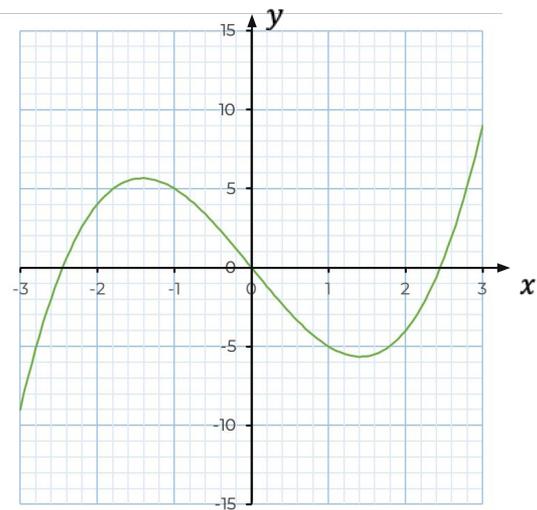


Use the graph to estimate the solutions to each equation.

a)  $x^3 + 2 = 0$   $x = 1.3$

b)  $x^3 + 2 = 8$   $x = 1.8$

2. Here is the graph of  $y = x^3 - 6x$



Use the graph to estimate the solutions.

a)  $x^3 - 6x = 0$   
 $x = 0$  or  $2.4$  or  $-2.4$

b)  $x^3 - 6x = -4$   
 $x = 0.7$  or  $2.0$  or  $-2.7$

